

The Effects of Emotional Intelligence on the Students' Learning Outcomes in a State High School

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ABSTRACT

This study aims to find out the influences of emotional intelligence on the learning outcomes of high school students. The method used in this study is a qualitative case study. The participants of this study were 48 high school students in Pekanbaru. The data was taken by administering questionnaire to those participants. The data was analysed qualitatively. The result informed that students' emotional intelligence affects learning outcomes. The results also showed that emotional intelligence can make some useful contributions in students' learning outcomes at schools, such as making them spiritfull in learning and being able to manage emotions so that they can achieve learning goals. This contribution is indeed influential. However, because the factors that affect learning outcomes themselves are quite complex, which are not included in this aspect of the study, further studies are recommended to conduct.

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1. INTRODUCTION

Indonesia's education trilogy consists of informal, formal and non-formal education. These three educational environments are a cycle that is related to each other. Informal education is the main and first education because it occurs in the family environment, while formal education is education that is carried out based on the laws and regulations that we commonly call school education (Auladi, 2013; Lim et al., 2021). Non-formal education is also an education that is usually obtained amid society (Misko, 2008). School as a formal institution is one of the means to achieve educational goals. Through the school, students learn various things that in the estuary will give birth to intelligent Indonesian people as stated in the National Education System Law No. 20 of 2003, article 3 is to develop the potential of learners to become human beings who believe and fear God Almighty, noble, healthy, knowledgeable, capable, creative, independent and become democratic and responsible citizens. Therefore, in order to realize intelligent Indonesian people, a learning process is needed.

The learning process that occurs in individuals is indeed something important, because through the learning process a person will be able to know and adapt to his environment that results in changes in him in a certain period of time (Irwanto, 1997). The change in question in this case is a change in

behavior, both in cognitive, psychomotor and affective. How far the change occurred, for that there needs to be an assessment with certain rules, and it is poured in the form of values. The results of this assessment are called learning or achievement results (Wirawan, 1996). With this assessment process we can find out the progress that has been made in learning.

Ordinary people still think that in obtaining high learning outcomes, it must be accompanied by high intelligence (IQ). It is why the term is labelled on someone who has high learning achievement with a high IQ designation. This statement is not inherently wrong, because according to its definition, intellectual intelligence (IQ) is a general term used to describe the nature of the mind that includes a number of abilities, such as the ability to reason, plan, solve problems, think abstractly, understand ideas, use language, capture and learn. However, keep in mind that a person's high learning achievement is not only determined by IQ factors. Many cases that we can find in schools, students who have low IQ actually have high learning achievement. Conversely, students who have a high IQ, their learning achievement is actually low. This is in line with Goleman's opinion (2000), that IQ is not the only determinant of a person's low success, IQ factor only contributes 20%, while 80% is the contribution of other factors, including Emotional Quotient (EQ) which is a person's ability to recognize, control, and organize emotions and feelings, both one's own feelings and the feelings of others. This intelligence also provides awareness of empathy, love, self-motivating abilities and the ability to deal with sadness and joy appropriately. As science develops, educational psychologists have found that human intelligence is not only influenced by IQ and EQ alone, it turns out that there is one more aspect that influences the Spiritual Quotient (SQ).

Spiritual Quotient (SQ) is essentially transcendence, which is the process of passing, overcoming, habitual penetration of meaning, especially from the material realm to the spiritual realm, and from the crude form to the sublime form. In this case, life is not only to obtain material, but must be truly experienced as a series of charities for others and worship of God. Therefore, it is not enough to rely solely on IQ and EQ, it must be accompanied by SQ. The simple thinking underlying this thinking is that everyone who has a high IQ needs to be controlled with a good EQ/ stable, while to be able to neutralize EQ turmoil can be done through a spiritual approach (SQ) by strengthening faith and piety. This will be able to build a noble soul and morals so that everything we do (including learning) will be meaningful, fun, and we do it with joy and sincerity. The point is, these three types of intelligence cannot be separated, so if asked which is the most important among the three, of course the three are important to have (Goleman, 2002).

Spiritual intelligence is a term coined by Zohar and Marshall. These experts have successfully synthesized, packaged, and popularized a number of recent studies in various fields of science into a formula popular enough to show that aspects of human intelligence are not enough just with IQ and EQ, but SQ is needed. Because spiritual intelligence has a very important role in humans as a guideline for other intelligence. (Cooper dan Sawaf, 1998). Now, not enough people are successful at working only with rational intelligence (which works with formulas and working logic), but people need emotional intelligence to feel happy, be able to cooperate with others and all those activities will feel more meaningful with the help of SQ.

The function of the human brain is not autonomic, but rather consists of parts that affect each other, which is why humans can understand everything that happens in life and its environment. SQ has a neuro-psychological basis on gamma frequency oscillations of 40 hertz, or synchronous neural oscillations that hold data together throughout the brain so that they are able to synergize in facilitating dialogue between mind and emotion, mind and body and potentially altering the material resulting from IQ and EQ processes. With this unification process, humans have full awareness in carrying out all their activities including in the learning process. For the obvious bond between IQ, EQ and SQ can be seen in the following image:

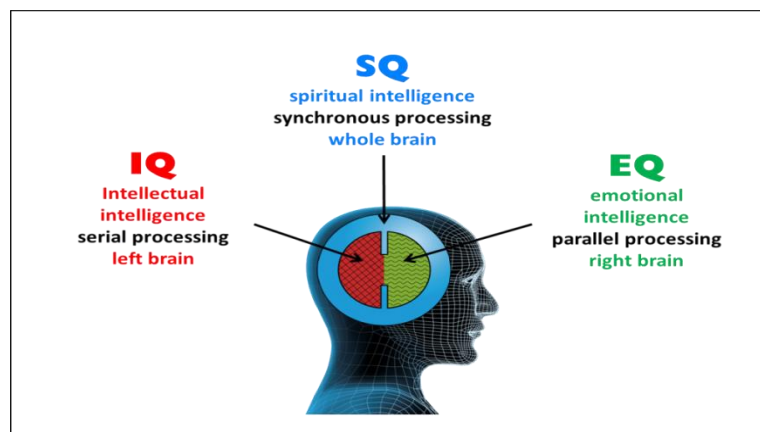


Fig 1. The position of IQ, SQ, and EQ

Regardless of the relationship between IQ, EQ and SQ as stated in figure 1 above, we cannot deny that in the learning process, a student must have a high IQ because in learning it takes ideas, thoughts and the ability to create something new. But in particular, the achievement of comprehensive educational goals is not sufficient through the development of intellectual intelligence alone. This is in line with the results of Goleman's research (2000) that intellectual intelligence is not a dominant factor in a person's success, especially in learning. We often meet students who are intelligent and always a champion of the class, when entering the world of work actually become subordinate classmates who in fact academic results are below them. As a result, many of us end up thinking apathy, why learn, if later people whose learning achievement is low is actually much better life. This happens because through good emotional intelligence, students can understand themselves and their environment appropriately, have confidence, do not give up easily and can form their character positively. For this reason, it is necessary to understand the emotional system in humans as Galbaith (2005) states that the human emotional system contains four components, namely thoughts, physiological changes, behavioral tendencies and emotional contexts that serve as a color to all three components of emotions. On this basis of thinking, researchers try to examine the extent of the role of EQ on student learning outcomes / achievements. However, that does not mean the important role of IQ and SQ in learning process is ignored, because researchers believe all aspects have complementary roles and influences.

In a research site, a high school in Pekanbaru, there was found a case that the teachers tried to implement the concept of emotional intelligence in which their students are taught how to manage their tensions in their daily basis activities while learning. This aims at instilling a belief that being emotionally stable can help them enhance the success of learning. This phenomenal issue intrigues the researchers' curiosity to study further the case by doing some investigations. Based on the explanations, this research is conducted. The questions of this study is, "What are the influence of emotional intelligence on students' learning outcomes?"

2. METHODS

The method used in this study is qualitative case study, mainly exploratory case study. In this case, researchers only need to reveal facts or everything that already exists by using research tools. The participants of this study were 48 students of class XI at a state high school in Pekanbaru who were enrolled in the even semester of the 2018/2019 school year. The participants were recruited using purposive random sampling. Using this technique, researchers took representation of 20% of each class in the population. That is, each class has a representative as a research subject, although the number is not the same, because the number of students in the class is different. The number of students sampled from each class was purposefully taken. More about the number of research samples from each class, can be seen in the table as follows:

Table 1 Distribution of Research Participants

Class	Number of students	Number of samples (20%)	Number of Rounding	Information
XI.1	28	5,6	6	Students taken in purpose
XI.2	30	6	6	
XI.3	30	6	6	
XI.4	30	6	6	
XI.5	28	5,6	6	
XI.6	28	5,6	6	
XI.7	30	6	6	
XI.8	29	5,8	6	
Number of participants			48	

Data collection techniques in this study are carried out using interview techniques and questionnaire techniques. Interviews were conducted to three teachers in that school. They are one male teacher and two female teachers ranging from 34 to 52 years old. They were recruited because they were among the teachers who have implemented the EQ approach in teaching and learning process. The questionnaires were developed using the theory of Emotional Intelligence (EQ) as mentioned earlier in the introduction part. To analyze the data, researchers used content analysis to find out what influence emotional intelligence gives on students' learning outcomes.

3. FINDINGS AND DISCUSSION

3.1. Giving positive spirits in learning

The results of this study have proven that emotional intelligence is one aspect that affects students' learning outcomes. Emotional intelligence had an effect on the learning outcomes. The point is to show that intelligence alone is not enough, one must also be good at managing emotions well because emotional intelligence is one aspect used to increase cognitive activity. This is in line with Mayer's opinion from the University of New Hampshire that the ability to think will be able to develop well if someone is able to control his emotional intelligence well. Thus, emotional intelligence is one of the factors that help the success or absence of students in learning (Goleman, 2002).

The highest emotional aspect of students is the ability to build relationships with others. This proves that the relationship between teachers and students and fellow students in the learning process has been well established, that is, in the learning process students have been able to develop an attitude of tolerance towards the opinions of others as well as respect the rights of others (Zirak, 2014). Adjusting to their social group embodies students by creating healthy interactions with other individuals. With this attitude, students can establish cooperation and open to other students to gain knowledge, information and insights that ultimately also affect the improvement of learning outcomes. Some students wrote on the questionnaires as follows:

- Student LY : "I am so happy that I can be more spritiful to study."
 Student KJI : "...It was hard to find focus, but now I can get it more easily."
 Student GN : "The teacher really helps me improve my grade by always giving motivation and suggestion to be more emotionally stable."
 Student L : "I think I can study better than before..."

Learning outcomes are not only influenced by emotional aspects. Learning outcomes are also influenced by behaviour, craft and skills or cultural factors in each area. Cultural differences in emotional expression in an area with other areas can also affect a person's low emotional intelligence (Altrov, 2013). Expression of emotions that are considered true in one area may be considered untrue

or inappropriate in another area. In this study, because there is no standard emotional intelligence scale in Indonesia, the authors tried to create their own emotional intelligence scale based on factors adapted from Goleman's theory, namely: recognizing one's emotions, managing emotions, motivating oneself, recognizing the emotions of others, and fostering relationships.

3.2. Helping Students Manage Learning Emotions to Achieve Learning Goals

The results of interviews conducted by researchers with several teachers also showed that; 1) Most students are already able to recognize and feel their own feelings; 2) thanks to guidance from the teacher, the student can already regulate his own emotions; 3) Students can use emotions productively as they gain more experience; 4) Students have good empathy for their peers because they can feel sad when their other friends are affected by disaster, and they feel happy when their friends are happy too; and 5) Most students are also able to work with their peers. Here is the following results:

Teacher AF : "I can see that they improved a lot especially, the marks are better..."
 Teacher LD : "Less conflicts are occurred; they are more cooperative and the scores are also good."
 Teacher DA : "The good thing is the students have better scores than before and they are more manageable..."

The results of this study are not only able to improve student learning outcomes, but also can be used by teachers as reference materials to develop and improve the quality of learning by always paying attention to the development of emotional intelligence of students. Thus, things like despair of the future, drug abuse, criminality, violence, depression, prostitution, delinquency and dropping out of school can be minimized (Song et al., 2022). Emotional intelligence cannot be taught specifically in schools and is not recorded in report card documents, such as lesson values or other skills, but this aspect can be trained through the process of transparency and habituation.

Good emotional intelligence will affect the student's sense of responsibility and be able to focus on understanding the subject matter or task being done and remain optimistic in obtaining optimal learning outcomes (Elias & Schwab, 2013). However, in its application, other factors that affect student success in the learning process such as environmental factors, level of understanding, how to learn and so on, of course, must still be considered because every aspect has an equally important role.

4. CONCLUSION

The findings showed that emotional intelligence can make a beneficial contribution in learning in schools. Based on the results of the data analysis obtained that emotional intelligence factors affect students learning outcomes because students can level up their learning spirits and manage their emotions during learning. As a result, students are able to accelerate their learning goals and achieve better learning outcomes. This influence is indeed detrimental, because the factors that affect learning outcomes themselves are quite complex, which are not included in this aspect of the study. On this basis, we really hope that the next researchers can develop these research results into a wider realm to find out the factors behind it.

REFERENCES

- Ahmad, M. (1997). Psikologi Pendidikan. Bandung: Pustaka Setia.
- Ahmadian, Z.M.A. (2014). The Relationship between Emotional Intelligence and Creative Thinking with Academic Achievement of Primary School Students of Fifth Grade. *Mediterranean Journal of Social Sciences*, 6(1), January 2015.
- Altrov, R. (2013). Aspects of cultural communication in recognizing emotions. *Trames: A Journal of the Humanities and Social Sciences*, 17(2), 159.
- Auladi, I. R. (2013). Mangrove conservation: Reconstructing formal, informal and non-formal environmental education in order to foster the development of a creative economy in Indonesia. *International Journal of Green Economics*, 7(1), 71-85.

- Azwar, S. (1997). Reliabilitas dan Validitas. Yogyakarta: Pustaka Belajar Offset.
- Azwar, S.. (1998). Tes Prestasi Fungsi dan Pengembangan Pengukuran Prestasi belajar. Yogyakarta: Pustaka Pelajar Offset.
- Cooper, R.K. dan Sawaf, A. (1998) *Executif EQ*, Kecerdasan Emosional dalam Kepemimpinan Organisasi, alih bahasa Alex TKW, Gramedia, Jakarta.
- Elias, M. J., & Schwab, Y. (2013). From compliance to responsibility: Social and emotional learning and classroom management. In *Handbook of classroom management* (pp. 319-352). Routledge.
- Galbaith, P. (2005). Emotional Skill Every Child Needs. Batam: Gospel Press.
- Goleman, D. (2000a). Emotional Intelligence (terjemahan). Jakarta : PT Gramedia Pustaka Utama.
- Goleman, D. (2000b). Working With Emotional Intelligence (terjemahan). Jakarta : PT. Gramedia Pustaka Utama.
- Gottman, J. (2001). Kiat-kiat Membesarkan Anak yang Memiliki Kecerdasan Emosional (terjemahan). Jakarta: PT Gramedia Pustaka Utama.
- Hadi, S. (2000). Statistik 2. Yogyakarta: Andi Offset.
- Irwanto. (1997). Psikologi Umum. Jakarta: PT. Gramedia Pustaka Utama.
- Lanawati, S. (1999). Hubungan Antara Emotional Intelligence dan Intelektual Quotion dengan Prestasi Belajar Siswa SMU. Tesis Master: Fakultas Psikologi Universitas Indonesia.
- Lim, M., Permana, L., Hongo, V. B., Kiandra, K., Nabasa, K., & Hasudungan, A. (2021). The Roles and Capabilities of Formal, Non-Formal, and Informal Institutions in Shaping Education Access in Cigugur Sub-district, West Java, Indonesia. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(1), 696-708.
- Misko, J. (2008). *Combining Formal, Non-Formal and Informal Learning for Workforce Skill Development*. National Centre for Vocational Education Research Ltd. PO Box 8288, Stational Arcade, Adelaide, SA 5000, Australia.
- Morgan, Clifford T, King, R.A Weizz, JR, Schopler. J, (1986). *Introduction of Psychology*, (7th ed), Singapore : Mc Graw Hil Book Company
- Nazir, M. (1988). Metodologi Penelitian. Cetakan 3. Jakarta: Ghalia Indonesia.
- Ohashi, C., & Abid, A. H. (2019). Equivalent to formal education or rethinking education through a lens of non-formal education: Case studies of equivalency programs in Asia. In *Cross-Bordering Dynamics in Education and Lifelong Learning* (pp. 30-47). Routledge.
- Syah M.. (2000). Psikologi Pendidikan dengan Suatu Pendekatan baru. Bandung: PT. Remaja Rosdakarya.
- Ratnawati, M. (1996). Hubungan antara Persepsi Anak terhadap Suasana Keluarga, Citra Diri, dan Motif Berprestasi dengan Prestasi Belajar pada Siswa Kelas V SD Ta'Miriyah Surabaya. *Jurnal Anima* 4(42).
- Saphiro, Lawrence E. (1998). Mengajarkan Emotional Intelligence Pada Anak. Jakarta : Gramedia.
- Sia, Tjundjing. (2001). Hubungan Antara IQ, EQ, dan QA dengan Prestasi Studi Pada Siswa SMU. *Jurnal Anima*, 17(1).
- Silalahi, Oberlin "Empat Kecerasan Seorang Pemimpin" Suara Merdeka 9 Juli 2005
- Song, F., Li, R., Wang, W., & Zhang, S. (2022). Psychological characteristics and health behaviour for juvenile delinquency groups. *Occupational therapy international*, 2022.
- Sudjana, N. (2001). Penilaian Hasil Proses Belajar Mengajar. Cetakan ketujuh. Bandung: PT Remaja Rosdakarya.
- Suryabrata, S. (1998a). Psikologi Pendidikan. Jakarta: PT. Raja Grafindo Persada .
- Suryabrata, A. (1998b). Metodologi Penelitian. Cetakan sebelas. Jakarta: PT RajaGrafindo Persada.
- Suharsono. (2002). Melejitkan IQ, IE, dan IS. Depok: Inisiasi Press.
- Syaiful Bakrie D. (1994). Prestasi belajar dan kompetensi guru. Surabaya: Usaha Nasional.
- Winkel, W.S. (1997). Psikologi Pendidikan dan Evaluasi Belajar. Jakarta: Gramedia.
- Wirawan, S. (1997). Psikologi Remaja. Jakarta: PT. Raja Grafindo Persada.